

CLAIMS

1. A crosslinked flame-retardant resin composition comprising:

100 part weight of a resin ingredient containing:

(A) polyethylene of which a melt flow rate (MFR) is 5 g/10 min. or less and density is 0.90 g/cm³ or more; and

(B) at least one polymer selected from:

(B1) alpha-olefin (co)polymer;

(B2) ethylene-vinylester copolymer;

(B3) ethylene-alpha, beta-unsaturated carboxylic acid alkyl ester copolymer; and

(B4) a styrene thermoplastic elastomer;

30-250 part weight of (C) metallic hydrate; and

1-20 part weight of (D) a zinc compound,

wherein, in the resin ingredient, the content of (A) the polyethylene is 30-90 wt% and the content of (B) the polymer is 70-10 wt%, and

one or both of a condition that at least one of (B) the polymer is modified by acid and a condition that 0.3-10 part weight of (E) an organo-functional coupling agent is further contained are met.

2. The crosslinked flame-retardant resin composition according to claim 1, wherein (D) the zinc compound is zinc sulfide.

3. A non-halogenous insulated wire comprising a conductor covered with the crosslinked flame-retardant

resin composition according to claim 1 or 2.

4. The non-halogenous insulated wire according to claim 3, being crosslinked by one of radiation, peroxide and a silane cross-linking agent.

5. A wiring harness comprising:

one of a single wire bundle including only the non-halogenous insulated wires according to claim 3 or 4, and a mixed wire bundle including at least the non-halogenous insulated wires according to claim 3 or 4 and vinyl chloride insulated wires; and

a wiring-harness protective material for covering the wire bundle, in which one of a non-halogenous resin composition, a vinyl chloride resin composition, and a halogenous resin composition other than the vinyl chloride resin composition is used as a base material.